

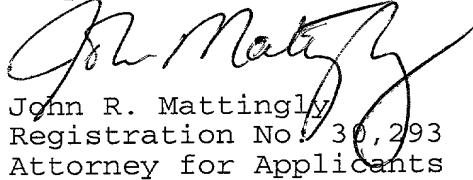
carried on alumina, a catalyst of Cu carried on alumina, a catalyst of Mn carried on alumina, a catalyst of Pd and W carried on titania and a catalyst of Co carried on alumina.

18. (Amended) An apparatus for the decomposing a fluorine compounds as claimed in claim 12, wherein said apparatus further comprises a gas scrubbing tower removing hydrogen fluoride and other water soluble components from a gas discharged from said reactor by contacting said gas with water or an alkaline aqueous solution.

REMARKS

Examination is respectfully requested.

Respectfully submitted,


John R. Mattingly
Registration No. 30,293
Attorney for Applicants

MATTINGLY, STANGER & MALUR
1800 Diagonal Road, Suite 370
Alexandria, Virginia 22314
(703) 684-1120
Date: September 13, 2001

MARKED UP VERSION OF REWRITTEN CLAIMS

5. (Amended) A process for the decomposition of fluorine compounds as claimed in [one of] claim[s] 1, [3 and 4,] wherein said a catalyst for the decomposition of at least one of CO, SO₂F₂ or N₂O contains at least one selected from Pd, Pt, Cu, Mn, Fe, Co, Rh, Ir and Au in the form of a metal or an oxide.

7. (Amended) A process for the decomposition of fluorine compounds as claimed in claim 1 [or 3], wherein said a catalyst for the decomposition of at least one of CO, SO₂F₂ or N₂O is selected from a catalyst of Pd and La carried on alumina, a catalyst of Pt and La carried on alumina, a catalyst of Rh and La carried on alumina, a catalyst of Au and La carried on alumina, a catalyst of Ir and La carried on alumina, a catalyst of Pd carried on alumina, a catalyst of Pt carried on alumina, a catalyst of Cu carried on alumina, a catalyst of Mn carried on alumina, a catalyst of Pd and W carried on titania and a catalyst of Co carried on alumina.

8. (Amended) A process for the decomposition of fluorine compounds as claimed in [one of] claim[s] 1, [3 and 4,] wherein said gas having been decomposed by contacting with said catalyst for the decomposition of at least one of CO, SO₂F₂ or N₂O is put through water or an alkaline aqueous solution to remove hydrogen fluoride and a water-soluble component contained in said gas.

9. (Amended) A process for the decomposition of fluorine compounds as claimed in claim 1 [or 3], wherein said fluorine compounds decomposition catalyst contains aluminum and nickel in the form of an oxide, and a ratio thereof in atomic ratio is from 50 to 99 mol% for aluminium and from 50 to 1 mol% for nickel.

10. (Amended) A process for the decomposition of fluorine compounds as claimed in [one of] claim[s] 1, [3 and 4,] wherein a reaction temperature for said a catalyst for the decomposition of at least one of CO, SO₂F₂ or N₂O is from 650 to 850°C.

16. (Amended) An apparatus for the decomposing a fluorine compounds as claimed in claim 12 [or 14], wherein said catalyst for the decomposition of at least one of CO, SO₂F₂ or N₂O contains at least one selected from Pd, Pt, Cu, Mn, Fe, Co, Rh, Ir and Au in the form of a metal or an oxide.

17. (Amended) An apparatus for the decomposing a fluorine compounds as claimed in claim 12 [or 14], wherein said catalyst for the decomposition of at least one of CO, SO₂F₂ or N₂O is selected from a catalyst of Pd and La carried on alumina, a catalyst of Pt and La carried on alumina, a catalyst of Rh and La carried on alumina, a catalyst of Au and La carried on alumina, a catalyst of Ir and La carried on alumina, a catalyst of Pd carried on alumina, a catalyst of Pt carried on alumina, a catalyst of Cu carried on alumina, a catalyst of Mn carried on alumina, a catalyst of Pd and W carried on titania and a catalyst of Co carried on alumina.

18. (Amended) An apparatus for the decomposing a fluorine compounds as claimed in [one of] claim[s] 12, [14 and 15,] wherein said apparatus further comprises a gas scrubbing tower removing hydrogen fluoride and other water soluble components from a gas discharged from said reactor by

contacting said gas with water or an alkaline aqueous solution.